

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below.

Please cancel claim 16 without prejudice.

No new matter has been added.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-14 (canceled)

Claim 15 (currently amended): A scanning microscope comprising:
 at least one light source configured to generate an illuminating light beam;
 an acousto-optical element configured to spatially split a sub-light beam from the
illuminating light beam and adjust an optical power of the illuminating light beam so as to provide
an adjusted illuminating light beam;
 a beam deflection device configured to scan the adjusted illuminating light beam over or
through a sample; and
 a beam guiding device configured to direct the sub-light beam split by the acousto-optical
element onto the sample so as to manipulate the sample.

Claim 16 (cancelled)

Claim 17 (previously presented): The scanning microscope as recited in claim 15 wherein the
acousto-optical element includes an acousto-optical tunable filter.

Claim 18 (previously presented): The scanning microscope as recited in claim 15 further
comprising a further beam deflection device configured to scan the sub-light beam over or through
the sample.

Claim 19 (previously presented): The scanning microscope as recited in claim 15 further comprising an objective lens configured to focus the illuminating light beam onto the sample.

Claim 20 (previously presented): The scanning microscope as recited in claim 19 wherein the objective lens is configured to focus the sub-light beam onto the sample.

Claim 21 (previously presented): The scanning microscope as recited in claim 19 further comprising a further objective lens configured to focus the sub-light beam onto the sample.

Claim 22 (previously presented): The scanning microscope as recited in claim 15 wherein the beam guiding device includes an optical waveguide.

Claim 23 (previously presented): The scanning microscope as recited in claim 15 wherein the sub-light beam has a specific polarization property.

Claim 24 (previously presented): The scanning microscope as recited in claim 23 further comprising a polarization control device disposed between the at least one light source and the acousto-optical element.

Claim 25 (previously presented): The scanning microscope as recited in claim 24 wherein the polarization control device includes a $\lambda/2$ plate.

Claim 26 (previously presented): The scanning microscope as recited in claim 15 further comprising a dispersion compensation device configured to compensate for spatial spectral dispersion, caused by the acousto-optical element, of at least one of the sub-light beam and the illuminating light beam.

Claim 27 (previously presented): The scanning microscope as recited in claim 26 wherein the dispersion compensation device includes at least one of a prism, a grating and a further acousto-optical element.

Claim 28 (previously presented): The scanning microscope as recited in claim 15 wherein the acousto-optical element is configured to direct, to a detector, detection light emanating from the sample.

Claim 29 (previously presented): The scanning microscope as recited in claim 15 further comprising an excitation pinhole configured to support confocal scanning microscopy.